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Contributors

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STUDY OF INDIVIDUALS



THE STUDY OF INDIVIDUALS (INDIVIDUOLOGY) AND THEIR NATURAL GROUPINGS (SOCIOLOGY).

By Dr. J. LIONEL TAYLER.

Read before a Meeting of the Sociological Society, at the School of Economics and Political Science (University of London), Clare Market, W.C., on November 23rd, 1905, Mr. S. H. SWINNY in the Chair.

The views that I am now putting forward are the summarised results of more than ten years study. It follows, therefore, that I have time to do no more than briefly touch upon the more important points of my position. This fact I would ask you to bear in mind. And though I must, for brevity's sake, express myself tersely with few qualifications, and therefore positively, I yet wish it to be distinctly understood that my paper is intended to be *suggestive* rather than dogmatic in its character.

My paper is divided into two parts, the first being merely a bare outline of my views, and the second part a short diagrammatic statement of the evidence upon which these views are based.

I.

The subject falls into four main divisions:-

(1) The broad proposition that sociology should be mainly based on individuology. (2) That it is not so based. (3) That sufficient individuological material is now available to

commence the work of laying a true sociological foundation.

(4) Suggestions as to the probable form of the sociological superstructure that would be erected upon such a basis.

(1) THAT SOCIOLOGY SHOULD BE BASED ON INDIVIDUOLOGY.

In my opinion, Herbert Spencer took the only scientific course open to him, when he maintained that sociology should be founded on the study of the mental and physical characteristics of individuals.

He bases his argument widely, taking inorganic instances, such as bricks and common metal shots, and proceeding from these examples to others, of the plant and animal worlds, till finally he arrives at man.

He states that "the nature of the units necessitates certain traits in the aggregate," but he does not emphasise the fact that the nature of the aggregate is also likely to exercise some modifying influence on the units of which it is composed.

No one will differ from him when he asserts that bricks and spherical shot cannot be piled in the same manner; no one will deny that in both of these instances the units in the piles are very largely the determining elements in the forms of the piles, and that these units being hard and resistant are little affected by the process of piling. But if, instead of taking examples of resistant units, I make comparisons with three such different substances as iron, rubber, and wax, it will at once be seen that the aggregate may have as large, or even a larger, influence on the form of the units as the units may have on the mass.

Spherical iron units would, it is true, be little affected by the way they were stacked; but rubber balls of precisely the same shape would be temporarily much modified by the weight of the balls above them, though they would tend to regain their individual forms when liberated from their mass positions; wax balls would, on the other hand, tend to have their individual character permanently modified, and

^{* &}quot;The Study of Sociology."

those most deeply placed would be much distorted while those superficially situated would be little. There is, moreover, a further fallacy evident in the instances that Spencer has chosen, for neither the iron shots nor the bricks die as social units do; so that there is no such continual change of units such as social aggregations invariably present, causing a constantly shifting movement in the positions of the units, and therefore a certain amount of permanent instability in the whole mass.

From this it follows that units determine the character of the mass most definitely when they are of a relatively unyielding nature, while the aggregate influences the units most positively when these are of a pliable, soft, inelastic material; and the whole form of the mass may be endangered if the units do not remain in relation to each other in a relatively fixed position.

If, however, the units are not homogeneous but heterogeneous in their characters, and if, moreover, each single unit is *itself* complex, it is evident that these additional factors will *immensely* complicate the situation. Yet this is the kind of study that we have to consider in all aggregates made up of living beings, and more especially is this so in man.

There are many varieties of citizens, and no two are ever exactly alike; and there are all kinds of angles and unexpected points in each individual's character that have to be taken into consideration. Are human beings so different from each other that it is impossible to foresee how they will be associated? Is society, in fact, founded on what is, to us, a chance aggregation, with no discoverable laws to explain its structure, or has its vastly complex existence a scientific basis?

Or, again, are all individuals of such a pliable nature that the aggregate form will invariably mould that of the units of which it is composed?

These are the problems that an individuological study would have to reveal.

It may possibly be asserted that there are other alter-

natives available for a sociological survey. If there are, no one yet knows of their existence. The physicist asserts that the nature of electrons and their relations to each other explain the nature of chemical atoms which are formed by them. The chemist believes that the character of the atoms and their relations to each other explain the properties of the molecules. The biologist is convinced that a study of the cells of which any plant or animal is made up is a necessary preliminary to the realisation of the nature and functionary capacity of the whole plant or whole animal. Societies are always composed of individuals; it must therefore follow that the nature of individuals, and the manner in which these individuals tend to group themselves, should be the foundation studies of our problem.

But electrons, atoms, cells, are all sufficiently permanent in their natures to enable sound scientific studies to be erected on their properties. Are human individuals, who form social aggregates, the one exception to this rule? Is man of so plastic a nature that he will conform to any form of life that the environment will impose on him? Are surroundings, and not human units, the main problem in social evolution?

To answer these questions, we may consider briefly a few obvious facts, which are of unquestioned acceptance.

No one denies that individuals differ very widely in their anatomical characters: some are tall, others short; some are dark, others fair; some are masculine, others feminine, and so on. Have these differences any significance? If they have not, then the whole science of biology, which is based on the assumption that structure and function are intimately related, falls to the ground. If these differences are significant, then the fact that they continue throughout life in the individual, and in generation after generation of new-born individuals, is itself evidence that individuals are not modified to any great degree by their environments; and therefore the study of such characteristics must be important to the sociologist.

Again, if we look at the history of man, we find no

evidence to support the belief in his modifiability. Primitive man must, it is true, have been greatly handicapped by his primitive environment. Granted that he quite possibly did survive and develop, in the earlier stages of his evolution, in a tropical region, and that this partially protected him, and that he could not have developed without this protection, yet he did not modify so as to better accommodate himself: being less hairy, acquire more hair; having feeble finger-nails, acquire claws; weak teeth, strong. On the contrary, he persisted in his own unique course: losing more hair, till he became naked; losing more and more combatpower in his hands, but gaining in discriminative and manipulative capacity; and while his teeth and jaws became less valuable as defensive and offensive weapons, they have gained as instruments of mental expressiveness. He has, in fact, continued his own evolution in spite of his surroundings. He has not become better harmonised to climate and neighbouring living influences, but by his brain and hand evolutions, which are characteristically his own, has subordinated more and more climatic and animal opposition to his development, so that now all non-human influences have become so far controllable that they are ceasing to be feared, and are, instead, being utilised by him solely for his own evolution. Man is not, therefore, a modified but the modifying element in world surroundings.

Once more, what force is it that checks social development? Not climate, for advanced civilisations are, or have been, scattered nearly all over the world. Not geographical nor geo-political position, for world-empires have developed and decayed in the most diverse situations, and savage man adopts savage contrivances in tropical, temperate, and frigid localities. Not buildings, for these can be pulled down and erected afresh. What checks one man from developing, and many men, is the opposition of other men; and this opposition of massed-man to individual-man, and of massed-man to nature is a growing force in world-life. How men and women tend to group themselves into sociological units, and how these complex units behave in

relation to each other, and influence the nation or empire to which they belong, is, therefore, the major problem of the sociologist, to which other minor geographical, commercial, and political studies will have to be related. Or, shortly stated, massed-man controls largely his own environment, and this environment controls the individual man; so that by survival of favoured individuals and elimination of unfavoured, by marriage and occupational selections, the new generation is fashioned.

But, in order to study how men tend to group themselves, it is necessary to realise how they differ individually. A preliminary individuological study is therefore necessary. Does such a study offer to the student reasonable prospects of ultimate scientific success?

Mr. Galton's researches on twins and on finger-prints prove beyond question the fact that man, throughout his individual life, retains his individuality, and he is therefore a self-acting unity which can be studied. Professor Starling *devoted a whole course of lectures to an insistence on the fact that individuals are organised on an individual basis. He states that "the large majority of the organs of the body are co-ordinated among themselves by the production and circulation of chemical substances," and this view I had already shown to be a necessary one for the rational understanding of the human and higher animal organism from the evolutionary aspect of the problem.† The varieties of mankind are, therefore, probably capable of being classified on an anatomical and physiological basis.

From, therefore, the fact of a well established anatomical diversity of type in man, which postulates like physiological and psychological conditions; from the history of man; and from recently discovered facts relating to man's nature, it is certain that individuals are not more, but much less plastic than was formerly supposed, and are, therefore, capable of being investigated individuologically, and being less influ-

^{*} Croonian Lectures, 1905.

⁺ Natural Science, September, 1899.

enced by their surroundings than was at one time realised, are more potent social influences, and of greater interest to the sociologist.

As the study of the cell, and the varieties of cells, is the foundation of biology, so the preliminary study of individuals (Individuology) is necessary to the study (Sociology) of the natural groupings of individuals to form social competing and enforcing units in the whole social aggregate. And as biology, when it realised the importance of the single cell, had to establish a new science, cytology, so sociology, when it realises the importance of the single individual, will have to establish individuology. And it will be from individuological investigations that scientific sociology will arise.

(2) Sociology is not so Based.

It is unnecessary for me to dwell much on this point. That there is no individuological science in existence is itself proof that sociology is not yet founded on the study of different types of human beings. Neither is any attempt evident among sociologists to emphasise this need. Most competent authorities, however, admit that both in the individual choice of an occupation and in the individual opportunities offered for marriage, unnatural occupational, domestic and class restrictions are imposed; and they see in these restrictions grave social dangers. They realise also that from the national point of view it is essential for each nation to utilise all the talent that as a nation it possesses, but they leave untouched the curious fact that slave, caste, or class formations have existed, and exist in one or more forms in all social aggregates of human beings that have been or are of more than a temporary character, and therefore it is probable that national energy and development of talent have some relation to such formations. In fact, this tendency of members of a State to group themselves has not been regarded as the central factor in the sociological problem; and hence the causes that have favoured various kinds of groupings have not been studied, nor the special value and

local fitness of slave, caste, and class systems of social

organisation been investigated.

"Equality of opportunity" is a phrase that is being increasingly used by sociologists in opposition to the tendency to favour or cripple those individuals who are fortunately or unfortunately placed by the "accident of birth"; but that occupational groupings and the evolution of group status is worthy of the closest scientific study seems to have been overlooked.

So, too, the disparity that exists between the kind of individual and the nature of the work that such an individual performs has been seen, and it has therefore been noticed, that biological fitness only rarely determines social position; but whether this custom that neglects natural aptitude is sociologically scientific or not has not been inquired into. It is quite clearly understood, owing to it being the general habit of society to regard the social stratum which an individual is born into as the guide to that individual's after development, that we have come to value the collective rather than the individual method of selection, speaking of wealthier and poorer classes, cultured and uncultured society, professional, mercantile, trading, artisan and labouring people, as if these collective terms had a true individual value; yet we fail wholly to ask if this collective standpoint is not a fundamentally faulty one, which the sociologist ought to resolutely oppose.

As a matter of fact, no two individuals are ever exactly alike, no family is ever homogeneous. One brother in a household may be intelligent, and another stupid; one industrious, and another lazy; one physical and primitive, centering his whole thoughts and feelings on sport, cricket, golf, football, or out-of-door employments; another, mental and advanced, being drawn mainly to mind realities. Sisters and brothers may differ widely, the sisters inheriting from one group of ancestors and the brothers from another. To assume, therefore, that either the collective family or the class status of the individual is a real practical test of such an individual's capacity is obviously illogical; yet we do

not consider what alternative to this is available. Did we do so, we might find ourselves compelled to adopt, as the only scientific position open to us, a type system founded upon the accurate grouping of individual bodily forms, as the only sound index to be discovered of their individual characters; or, shortly, be compelled to accept an individual viduological basis for our sociological superstructure. That there is no such basis in existence at the present time is, however, self-evident.

(3) INDIVIDUOLOGICAL MATERIAL.

In this section I wish merely to point out that sufficient evidence is now available to enable sociologists to commence an individuological survey, and to demonstrate the sociological direction in which such a study must tend, by showing that there is reason to believe that development of the human form is the general accompaniment of social evolution, and therefore presumably, in part, at least, its cause.

The material may be grouped under four headings:-

(1) Evidence as to the completeness and permanence of individuality in man. (2) The presence of types of mankind in society, and their causation. (3) Evidence of selective agencies acting on these types under social conditions.

(4) Relation of individual types to social formations.

- (1) The completeness of individuality is established by a study of the degree of co-ordination of different parts of the individual organism to each other, which demonstrate that man is, in this respect, the most individualised of all animals; its permanence, by evidence that proves that bodily tissues preserve throughout life their characters, and that the individual preserves his physical and psychic individuality during the whole of his existence. These conclusions are now admitted.
- (2) The presence of types of mankind in all social organisations which can be classified, and their causation, is not, however, so generally recognised.

It will be said that though facts exist which prove

both the existence of individuality and its permanence, yet individuals are so diverse in their various characteristics as to be unclassifiable, and, therefore, from the sociological point of view, cannot be studied to advantage; that each individual, being unique, is not groupable, and therefore no sociological science could be founded upon such an individuological basis.

That this is not a well founded contention may, I think, be easily proved. While it is unquestionable that each individual is in certain minor but important details of his or her nature unique, yet this uniqueness is not sufficiently marked to prevent classification of larger differences, and the grouping of one individual with other individuals who are similar on these lines. Thus, however much unlike one woman is from another, yet all women, who are not abnormalities, have certain physical and mental similarities that are common to all women as women, and which distinguish them from men. In like manner, a large brain and a large brain-case (cranium), with a face small in proportion to it, are characteristic of man, and of civilised man as compared with barbaric man; and other physical features connected with the erect human bipedal condition can also be enumerated, and these are correlated with human psychic qualities. Colour differences are also observable, as are others of massiveness of structure, height, etc. These features are classifiable, whether they have been classified or not does not affect the question, for they are real and permanent distinctions, and therefore must be significant. There is, further, reason to connect sex, mind, height, and perhaps colour differences with gland structures, so that the reality of these distinctive anatomical and psychic peculiarities is supported by physiological science. Moreover, sexual and mental feelings and desires, and probably others not yet recognised, have unquestionably been enormously powerful influences that have modified social development. Commonly accepted facts, therefore, prove that some individual characteristics are both classifiable and important.

(3) That selective agencies acting upon individual

citizens are at work (such as disease eliminations and enfeeblement, vocational and marriage selection) will not be disputed, though it may possibly be held that these have no social value. This view, however, cannot be settled by dogmatism; scientific research will alone prove or disprove its accuracy.

(4) Lastly, if individuals are possessed of permanent characters, if they do fall into types which can be grouped and studied, and if there are selective agencies at work, is there any further evidence to suggest that the individual

type corresponds to the social formation?

In Part II. I hope to offer sufficient material to make it probable that some relation does exist; and if this be the case, then the establishment of an individuological basis for sociology is only a matter for time and patient investigation to accomplish. Should more detailed effort fail to support this connection such labour will not have been in vain, since it will have proved either that sociology is not a science—and, from the uncertainty of the phenomena that it embraces, can never hope to be one—or if a science, one that is governed by quite other principles than chemistry, biology, astronomy, and modern physics, in that its unit (i.e., the individual citizen) is not the central point of research, as the atom, the cell, the stars and planets, and electrons respectively, are in other sciences.

Close scrutiny may reveal errors in the position that I have here outlined, difficulties that I have underestimated, objections that I have failed to realise; but if this individuological basis be a wrong one, what other alternative is left to us?

Locality does not explain the social organisation of man any more than it explains the social organisation of other animals, though it may have had, and, I think, has had, a powerful subordinate influence. In 1899, I pointed out that it is the struggle between living organisms that has led to biological evolution, and not of living forms with a non-living environment; and in man it will, I believe, be found that it is the human environment directly and mainly,

and only indirectly the animal, vegetable, and inanimate surroundings, that has caused his social evolution.

If the view here presented be even only partially sound, sociology will consist, in its greater aspects, of studies of human types and their social groupings, and of methods designed to consciously and unconsciously guide individuals towards social ends; hence, the selective influences of disease, industry, and marriage will form the principal part of sociological research; and the systems of slave, caste, class, and type grouping will be examined in order to discover which one of these is best suited to modern progressive life.

On such a foundation some such temporary superstructure could be erected as the following:

(4) Sociological Superstructure.

(a) Biology makes it probable that to develop an individual in accordance with the bent of his or her individuality, is likely to lead to better and more lasting cultural results than to attempt to disregard such individuality. This view is steadily gaining ground among educationists. On an individuological and sociological basis, this aptitude of the individual has also a social value. In a suitable environment, which does not favour acquired degeneracy, a healthy child if healthily environed tends to grow into an adult individuality, with individual desires which will tend to find realisation, by individual choice, in a suitable occupation, and in a suitable marriage; and this choice will be the natural outcome of previous healthy biological development unretarded by education.

(b) Industrial and cultural opportunity would allow this natural choice to assert itself. Healthy talent-selecting struggles would result, and, from class surroundings coming to have a true individual value, marriages based on love of a kindred individuality, rather than physical lust or mercenary motives, would result. This would lead to natural occupational and domestic groupings, and a socially efficient and an individually healthy nationality would be favoured.

(c) Such marriages would raise the moral tone of the individual citizen, and therefore improve the general social standard; while, as a result of unconscious selection in representative class circles, marriages of efficient individuals with efficient individuals would be favoured, and, through failure, the inefficient would be discouraged. Thus would arise, through type, vocational, and marriage opportunities, newer generations—children chiefly of selected parents—which would in their turn evolve still higher social atmospheres that would again select those most fit for parentage.

Social evolution being due to the natural tendency of all individuals to group themselves according to their natural aptitudes and natural tastes so as to found groups or classes, which at first survive because of their social value and efficiency, and later partly by organisation and control of social resources; and social devolution being due to the not less natural tendency which causes these same groups and classes to become closed combinations of individuals acting selfishly for their own aggrandisement, so that inefficient caste dogmatisms are substituted for efficient class ideals, it is the task of the sociologist to devise means by which the former tendency can be checked and the latter favoured.

Probably one of the best means of accomplishing this end is by the persistent attempt to raise the whole social condition of the nation or state to a more human level; and this necessitates a continuous hygienic reform in the surroundings-increased educational opportunities for, and increased vigilance against anti-social action on the part of the lowermost strata of society. By this means an increasingly keen competitive mental struggle will be fostered by the desire of the best members of the lower strata to displace the worst of the higher, and thus exclusive caste organisation, with its attendant corruption, would become increasingly difficult to maintain. Selective influences will not, as it has been claimed, be checked; but their character will be changed, a mental-selective test rather than a physical-barbaric one being imposed. The lower types of human beings, rather than the higher, would thus tend to be eliminated—by diseases

resulting from failure in life, by results of their own brute excesses, by imprisonment, retention in asylums, inability to marry and support a family, and other causes. A natural unconscious environmental eugenic selection would thus be established as a result of applying such sociological principles to life as would largely render unnecessary conscious state-controlled eugenic effort.

The difference in outlook between this view of sociology and the older ones may here be briefly stated. Past social effort has been directed, and in large part rightly directed, to faulty surroundings of the individual; but it has been largely inanimate surroundings that have been considered—defective drainage, damp houses, narrow streets, low wages, deficient means of locomotion, etc. If the view here outlined is correct, these efforts, though useful, are quite inadequate. The problem to face is a larger one, not primarily the non-living but the living environment.

Why are nineteen out of every twenty slum-inhabitants fairly content with their lot? Why do men go to publichouses when their homes are often more comfortable? Why is it that cheap literature of good quality is so little appreciated, and that the respectable navvy will spend five, six, or even seven shillings weekly on beer and spirits to drink, and one shilling to two shillings on tobacco, but not one single penny on mental food other than that which is sensational, physical, and evil? Why is it that there are thousands of men and women in every large town who are satisfied to live under the most unhygienic and indecent conditions? Why is it that some boys and girls, often in spite of the best efforts of their parents, are idle at school and grow to be men and women who hate work and will not work except from compulsion? As individuals are different physically, so also are they different mentally; and to answer these questions we must study, not so much the homes of such people, but the inhabitants, their desires, and their methods of living. In short, we must found our work upon an individuological rather than upon a street- and house-designing basis.

If this individuological interpretation be accepted, sociological science would become in one sense a post-biological study; the alternative to this is a post-geographical one. Every sociologist must, it is true, study man and his non-human environment, but to one or other of these investigations he must ultimately give precedence. Either, therefore, the human organic environment is the great vital factor for sociologists to realise, or the inorganic is. One or other must be subservient. If the latter, then the importance of inanimate surroundings will make the investigator concentrate most of his attention on climatic and industrially favourable situations, and on the architectural details of city or country topography; he will study urban and rural relationships under the belief that men and women are moulded or affected by the things rather than the beings around them.

If, however, collective-man is assumed to be the active power, then the existing types of citizens and their numerical proportions to each other in each tribe, nation, state, or empire, and their adequate or inadequate representation will be likely to determine the character of the social formation.

It is the imperative need for facing these alternatives, and realising the consequences to sociology that must result if the wrong study is chosen as its guide, that I would ask you to consider. On the one hand, there is the view that the nature of the climate, the physical characteristics of the soil, the geo-political position of the country, are the factors which make a nation great or small, significant or insignificant; on the other, the belief that race and individual character differences are the more important elements, and the inorganic surroundings largely the conscious selection and result of the living activity of the men and women that live in them. These views are mutually exclusive: either massed-man (later grouped-man) is strong, and nature and the influence of the products of past human activity weak, and are valuable only as their appeal to him is accepted; or, he is largely the product of what surrounds him, and is modified accordingly. The whole weight of biology supports the former view, and the evidence in favour of the latter has

never been critically examined. Which belief are we as

scientific sociologists prepared to accept?

It is not a question, however, of rejecting either environmental or human studies, for the need of both is generally admitted; but simply which group of factors is the active and which the passive one, and which must therefore be regarded as the dominant sociological aspect for the sociologist to be directed by. It is this alternative that I would put forward for your consideration, pointing out that the individuological outlook has for some reason never received the attention that I think its merits and claims deserve.

II.

The main line of argument followed in Part I., to the effect that sociology should be founded upon individuology, rests on facts of such wide acceptance that little further evidence is required beyond that which is already known. Either the inferences that I have drawn are inaccurate, in which case they will be rejected as being an imperfect interpretation of the phenomena considered, or they are accurate, and, if so, my conclusions will be accepted and this much of my general contention will receive recognition. Because on this point my appeal is to the logical rather than to the evidential side of the question, the accumulation of further evidence will not strengthen the position.

The second assertion, that sociology is not based upon individuology, is obviously true and needs little further comment. It is generally admitted, however, that all talent in the State should as far as possible be utilised. It is sufficient, therefore, to produce evidence to prove that a large amount of wastage occurs, to make it probable that some kind of individuological survey is desired. This point I hope to consider more fully on a later occasion, showing how much individual capacity is wasted in all directions, but as few people of experience will dispute this general statement, I must content myself with observing that my experience as a medical man has enabled me to find even in the most degraded localities two or three individuals in

almost every large street who had no social outlet for their powers, and who were in natural capacity far above their

surroundings.

There, therefore, remains to review in briefest manner the evidence as to the possibility for an individuological basis of sociology and the differences of outlook that such a basis would give to the sociological superstructure raised upon it.

(a) Permanence of Type is established by the following

facts:-

Germinal Tissues persist through an indefinite number \ of generations almost or quite unmodified. This proved by fact that mammalian tissues remain mammalian; avian, avian; insectal, insectal, etc.

Glandular, Muscular, Nervous, Osseous Tissues retain their characteristics throughout the life of the individual and are of a more or less permanent nature in the race.

Researches on "Twins," "Finger-prints," by Galton and others show that the individual retains his physical and mental individuality throughout life.

In spite of a common blood or other circulatory medium.

- (b) Co-ordination established by facts that prove that:-
- (i.) Thymus, Thyroid, Genital, Pancreatic, Pituitary Glands are all intimately connected with the growth and activity of the whole body.
- (ii.) Salivary, Gastric, Pancreatic Juices are all related to each other; and that activity or sluggishness of one affects the other digestive functions; and that a whole series of chemical substances belonging to the purin group have been found in related stages in different parts of the body.
- (iii.) Organismal anti-toxin reactions to diseases are manifested.

(iv.) Local Diseases affect the organism generally.

Disorder of local supra-renal gland causes a general disease, Addisons

thyroid " general diseases, Myrodema, Exophthalmic Goitre Cretinism

" is associated with Diabetes pancreatic

pituitary Acromegaly " female sex Inversion of

Sexual Characters

male sex

- (v.) Extirpation of supra-renal, thyroid, and other glands causes death.

 Extirpation of male or female sex glands causes change of sexual characteristics.
- (vi.) Nervous system in vertebrata exercises a general control of whole organism.
 - (c) Presence of Types and their Causation.

Works of reference dealing with anomalies of the human body usually recognise the following divisions:

(1) Mental; (2) Sexual; (3) Height; (4) Colour; (5) Developmental abnormalities, and also obese and lean states of the body. Within this abnormal range of variability are found normal corresponding tendencies which may be classified as follows:—

(1) Mental.	Abnormal	Epilepsy, etc. Feeble-mindedness Habitual criminality	Normal	Genius Talent General capacity
(2) Sexual.	,,	Hermaphroditism	" {	Undifferentiated Differentiated Asexual
(3) Height.	,,	Giantism: acromegaly Dwarfism: achondroplasia	,,	{Tall Short
(4) Colour.	"	{Albinism Pigmentism	,,	{Fair Dark
(5) Developn	nental,,	{Infantilism Senilism	,,	Youthfulness Matureness

In practice, I have found this classification easy of application and capable of being used for all individuals. With regard, however, to mental and sexual capacities there is much evidence in favour of progressive evolution in progressive races, and it is this evidence that is of sociological significance.

The mental differences of the individual may be studied from six aspects at least. By investigating the relation of (1) the higher apes to man; (2) savage races to civilised; (3) classes in one civilisation to each other; (4) the different periods of development in a nation to each other; (5) of succeeding nationalities and empires to those that had existed before them; (6) of the types of individuals

attacked by disease. Each of the six points to the conclusion that man is advancing, passing out of the paleogenic and mesogenic stages into neogenic ones, from the stooping, physical, animal state to the erect, mental and human existence.

It is coming to be more or less widely accepted, and indeed it is little more than an obvious fact, that differences of sex have grown with growing civilisation. Beginning with a more or less undifferentiated savage, masculine type of woman who, except for primary sex differences, closely resembled man in her bodily form and mental character, and a savage type of man with many womanly features, the modern womanly and manly individualities have been slowly evolved. Any well illustrated work on anthropology affords striking evidence on this point. The faces of the men and women are often so alike as to make it quite uncertain to which sex they belong, while the smaller hips and more muscular limbs in the woman and often the fuller breast regions in the men make the resemblance remarkably close. In the more civilised races, probably as a result of more settled social conditions, a growing differentiation becomes manifest, and persistence of this undifferentiated state is now alluded to as a state of femininism in the man and masculinism in the woman.

Differences of height, colour, mass and degree of development reached, remain, but I shall not touch upon these nor consider further in this paper sexual and mental differences. I shall merely content myself with noting that the brain-cells have many resemblances to gland-cells in their resting and active stages, that they possibly throw off products into the circulation which effect changes in the form and development of the body; that sex certainly, height probably, developmental differences unquestionably, and colour differences possibly, are all related to gland activity, therefore type studies founded upon such phenomena are possible.

The accompanying drawings* of these types, on which

^{*} Plate I.

a few words may be said, will help to make my meaning clearer.

All the studies are intended to be broad generalisations of types that unquestionably exist, and I have endeavoured to make them as accurate as possible. They were kindly prepared for me by Miss Minna Tayler, and are simply charcoal outline sketches. The plan we adopted was briefly to construct from numerous photographs, from measurements which I had collected and other sources, figures that suggested to me most vividly the differences of form that I, as a medical man, had observed in my patients. The material that I have collected is far too unwieldy to be reproduced here, and while the impression is in the main true it could not from the nature of my experience have been worked out in detail capable of statistical treatment, for I had to make my notes after my patient had left me and before I examined another, and for medical reasons the examination necessarily varied with the disease. All the cases selected were only indisposed and not seriously afflicted with disease, and all were under thirty years of age and had reached maturity, the most common period being from 20 to 25. By this age exclusion I was able to remove all cases of stoutness due to unhealthy bodily states and to make the comparison of differences of form more reliable.

The paleogenic* types have, of course, been largely constructed from anthropological data already in existence. It is, however, very surprising how near some of the lowest individuals of the English and other civilised races approach this older form. The mesogenic womanly illustration was obtained by making a detailed study of picture galleries such as Hampton Court, the National Gallery, etc., and selecting those painters that belonged to the sixteenth, seventeenth, and eighteenth centuries as the only evidence available for the study of the form in the middle period of European civilisation. No study of nude man is possible under these

^{*} Term suggested by a Nature reviewer in reference to a previous work of mine, "Aspects of Social Evolution."

conditions, for man was not a subject for artistic treatment during these times. That a corresponding mesogenic man did exist is proved largely by the similarity of facial form of the man and woman of this period, but the figure studies are not sufficiently numerous to be investigated for common characters.

The neogenic illustration was obtained largely direct from life. It is really remarkable, if one is in the habit of observing any large number of individuals daily, to note the differences that present themselves. That there is an increasing number of individuals who are born with neogenic characters I have personally no doubt whatever, and that at present we understand very little about their needs either from a medical or social point of view I am equally convinced. The studies of woman on the psychological side by Laura Hansson, and the fact that the neurasthenic woman (not the hysterical nor neurotic) belongs almost exclusively to this neogenic type, show convincingly that the newer mentally endowed woman is even less understood than the newer man.

The asexual studies were made from men alone, and in all of them I had evidence of late growth, late sexual maturity as well as the characteristics here portrayed. The long-limbed and short-limbed types were obtained by studies of giantism, acromegaly, and from actual causes, and the slight and massive forms, are matters of daily observation.

(d) Selective Agencies.

Looking at the selective influences that affect the lives of the great majority of citizens of any well organised national group it is clear that these may be studied under three main divisions: (i.) Disease, (ii.) Marriage, (iii.) Vocation.* All the important elements of the problem are, I think, grouped under one or other of these heads.

^{*} Mortality from war in the modern states affects mainly the military class and can therefore be considered under Vocational risks, and Childbirth dangers can be studied under Marriage influences.

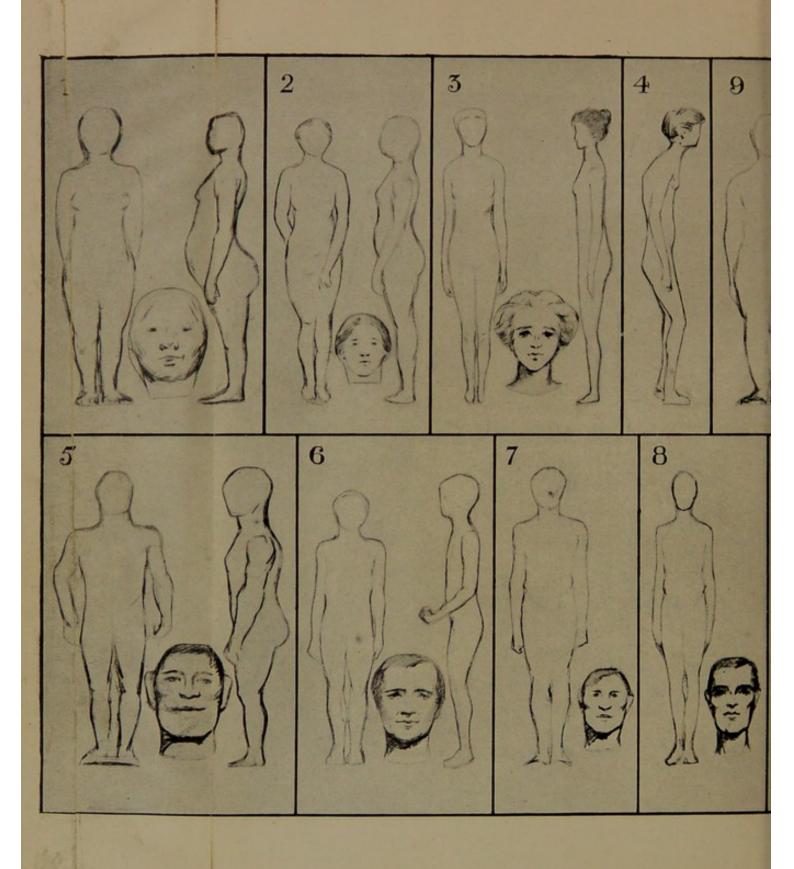
(i.) Disease.

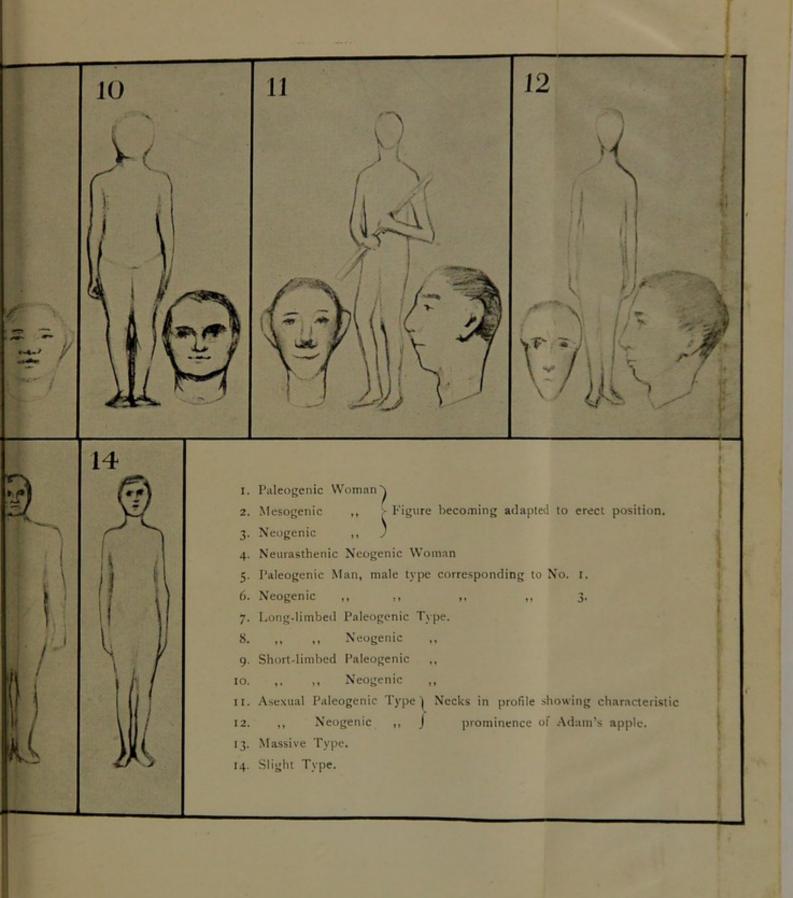
To look at the problem sanely, it is first necessary to free ourselves from the many gratuitous, and in some respects disgracefully unscientific, assumptions that have been made in regard to the subject of degeneracy. It has been assumed that because a type is subject to a particular disease it is therefore degenerate. In most cases it is true the tubercular disorder has been the one complaint most frequently mentioned as a disease that is supposed to reveal some constitutional taint, though of late years cancer has also been treated to a similar method of ostracism. The implied assumption is, at least for these two diseases, that susceptibility to such diseases is proof of constitutional failure. But if this is true of one disease why not of others? And as every individual is individually predisposed to one or more diseases it is evident, if one pursues this argument to its logical termination, that all individuals are degenerate because all are predisposed, an obvious reductio ad absurdum.

Again, it is asserted, without one single supporting fact, that evidence of insanity in a family should be regarded as testifying to some degree of degeneracy in the family, and be in some way a bar to the marriage of its sane members. Insanity is, of course, evidence of individual disorganisation in the individual affected, but its hereditary significance depends wholly upon the question whether the insanity was or was not dependent on sufficient environmental provocation. An individual of highly organised mental capacity and desires would be extremely likely to become mentally enfeebled or diseased as a result of being compelled to live in slum surroundings; but the fact of his insanity would be proof in this instance of his inborn evolutional capacity as compared with the typical slum inmate who remained sane.

Without, therefore, unnecessarily multiplying instances, it may be stated that neither susceptibility to disease, nor proof of the existence of disease, nor any disorder of functioning is of the slightest importance in the study of inborn racial









degeneracy unless it can be shown that failure has resulted from faulty individual capacity and is not due to environmental defect.

Again, a large part of the evidence in favour of degeneracy has been based upon the assumption that deficient height and weight in the individual is proof of unsatisfactory individual and natural conditions. But the whole point at issue is the difficulty of determining what is deficient height and what deficient weight. Thus two men of six feet in height, that I am acquainted with, that vary less than an eighth of an inch between them, both thirty years of age, and both having been to my certain knowledge in good health for the past five years, and whose weights have not varied more than two or three pounds during this period (this constancy of body-weight being one of the best tests of health that medical men possess), both doing their work easily and neither being exceptionally fat or thin, yet differ in their respective weights as much as 2-stone 12-lbs. On what principle are we to assume that either of these men is unhealthy or degenerate? Both were well cared for and well fed during early years, therefore this is not even an acquired difference; if nearly three stone can be admitted as a possible healthy divergence in weight between individuals of the same sex, height, and age, it is hard to see what value is to be attached to the weight test as at present applied, as evidence of national or individual deterioration. Different rates of growth make the same test quite valueless in children and adolescents. Height again is open to the same objections, and even asymmetry may be the result of a progressive quite as probably as a retrogressive change. Nothing less exhaustive than a detailed individual study based upon the one certain test of inborn capacity, to live healthily under individual conditions, will free our social studies from the present confusion, and for this a clear realisation of the difference between inherited and acquired degeneracy, such as the accompanying diagram outlines, is

DEGENERACY.

INHERITED.

Inco-ordination of speech

- " " bodily movement
- " visceral activities
- " " special senses
- " " mental processes

Reversions.

Psychic (a) Appetite-dominance

- (b) Nomadic anti-social tendencies
- (c) Nomadic anti-domestic tendencies
- (d) Feeble-mindedness
- (e) Imbecility
- (f) Undifferentiated sex feelings

Physical. Sexual (a) masculinism

- (b) femininism
- (c) asexualism
- (d) mongoloid, microcephalic anthropoidal

states

Defects. (a) Cretinoid conditions

- (b) Infantile
- (c) Early senile ,
- (d) Fatty, Muscular, Visceral, Nervous, Glandular and other tissue defects.

A future possible menace. 1%—3% of population.

Individuals of this class tend by their defects to become naturally sterile. Uncertain therefore if a special remedy is required.

ACQUIRED.

Habit-Spasms.

Disease-Degenerations

- (a) Syphilis, Gonorrhoea, etc.
- (b) Narcotics (alcohols, etc.)
- (c) Phthisis and other tuberculous states

Educational

Distaste for culture

Loss of individuality

- " manliness
- " womanliness
- " vocational desire
- " domestic desire

Occupational

By avoidable dangers and antisocial selection

By unavoidable dangers and social selection

(Resulting in elimination by disease of constitutionally unfit.)

Domestic

Loss of Home desire

- (a) through faulty marriage
- (b) low wages
- (c) immorality.

A certain present danger affecting large majority of population.

A study of type fitness affords only hope of remedy for such evils.

The more closely inherited degenerations are studied and compared with acquired degenerations, the more it is rendered evident that the latter group is far the more important one, and it is seen that remedies available for the

acquired dangers operate also against the inherited.

Three groups of diseases account for an enormous comparative mortality in adults and children, and, as affording a clue to the selective influence of some disorders, may be alluded to here. (1) Diseases due to immoral life; (2) those resulting from narcotic indulgence; (3) consumption and other tubercular complaints. The first two, those due to immorality and intemperance, can be partially remedied (a) by improving social conditions so that surroundings will be deterrant to individuals inclined to give way to excess, (b) by giving every opportunity for persons with these tendencies to sink to the lower grades of society so that they will be socially less favoured than more self-controlled citizens, (c) by aiding all higher individuals, by means of progressive laws and customs, to attain early in life opportunities for realisation of their marriage and vocational ideals. The third group (tubercular) can only be combated by improved hygiene. If remedial measures on these lines were carried out disease would attack mainly those of anti-social character.

But as the matter now presents itself, the higher type is often eliminated by lower surroundings, and this is clearly seen in all consumptive disorders. It has long been recognised that two types of individuals are attacked by this disease, the heavy, strongly built individual and the slight, active, mentally alert person. The reason for these two persons being selected is evident. The strong, physicallydesiring, large-faced, small-headed patient has drunken habits, is intensely sensual and immoral, and gives way generally to physical excesses; he is a natural barbarian, who would thrive under barbaric conditions, and only becomes consumptive late in life as a result of his own animalism and his town surroundings. This paleogenic citizen is of diminishing use to society, and his elimination is already being imperfectly accomplished by his segregation in asylums and prisons. The refined mental type, on the other hand, is diligent, social and self-controlled; and in a hygienic environment such

people live healthily, and raise the mental standard of the nation by their pursuit of mental ideals. It is the barbaric anti-social conditions that still persist-low wages, high rent, long working hours and bestial surroundings - that cause the high mortality amongst them. In this question of disease elimination, as in other social problems, the issue turns on the question of type. How are we to treat the paleogenic and the neogenic forms in our midst? Because the neogenic individual has a more highly developed nervous organisation he is more delicately organised and therefore more susceptible to unhygienic influences and dies early in life if subjected to them, leaving few children to perpetuate his characteristics, and these are early affected by the slum features that destroyed the parent. While the big-faced, contented, sleepy, paleogenic type of baby often thrives when bottle-fed on sour milk and in the dirtiest surroundings, the large-headed, restless, excitable, neogenic, child dies of diarrhœa, convulsions, or consumptive brain disease. Later, at school, this quick type is foolishly pressed forward, and consumptive disease again frequently very early destroys a promising life; acute rheumatism leaving heart disease which terminates fatally is also an enemy to this brighter, more human individual, and in all these cases death tends to result before maturity is reached and therefore before parentage. The tough loafer's child on the contrary, picking up crusts of bread from the gutter, decayed fruit from heaps of refuse of costers' leavings, survives like an animal on food that is little better than offal, becoming later a young hooligan, marrying early, or perhaps not marrying, but in either case begetting many children; he lives till forty or fifty before he dies a victim to alcoholic or syphilitic disease or consumption. You can eliminate this paleogenic type by one means only, namely, making the environment increasingly civilised in its character, and making immoral, drunken, idle and dirty habits punishable. The wildness of his nature will, if these social restrictions are enforced, force him down to a lower stratum of national life, where occupation is more difficult to obtain and where prostitution, itself being restricted, instead of parentage, will

cause him to become sterile. It is this failure to realise that the drunken individual is able to, and does, bring into existence a large family to perpetuate his type before he is destroyed by alcoholic influences that, in my opinion, renders Reid's view untenable; though I feel that his insistance on the influence of disease is both right and in some senses novel. My view and his may be thus compared:—

TAYLER.

- Progressing social environments necessarily increasingly protect physically while they expose the individual mentally to greater dangers.
- (2) The lowermost areas of society are freest from these physically protecting influences, hence neogenic types are destroyed, and paleogenic survive in slum surroundings.
- (3) With higher social conditions, the diseases testing physical endurance are destroyed by hygienic developments, but others arise that test mental tenacity and strength.
- (4) Heredity and environmental selection the chief factors in race evolution.
- (5) Slums favour barbaric types and are social and individual evils.
- (6) Education may develop or spoil but it cannot create capacity; this is innate and of paramount importance.
- (7) Social opportunity based upon a relative as well as an absolute type fitness is an unconscious but efficient eugenic factor.
- (8) To some diseases all races have to acquire resistance, developing by selective elimination. (Reid)

REID.

- (1) Races through selection must acquire resistance to disease and narcotics. Disease not evolutionally significant.
- (2) Slum or conscious eugenic influence necessary.
- (3) Educative influences paramount in the human individual.

- (9) From others, progressing social nationalities have to be protected by hygienic precautions. These alone have an evolutional significance. (Tayler)
- (10) The use of narcotics socially and individually dangerous and devolutional. Resistance to these cannot be individually acquired without mental deterioration, and racially only by survival of neogenic types.
- (11) Conscious eugenic restriction largely unnecessary and destructive of individual and social human ideals.

The problem of degeneracy and disease should therefore, I think, be approached from the hygienic side, and by raising the character of the environment so that it will select mental types and eliminate physical. In like manner, all the educational influences, occupational dangers and domestic evils which favour acquired degeneracy should be studied from the environmental aspect, and should aim at fostering through type opportunity, mental selection of the mental (neogenic) types of citizens. Disease becomes an evolutional factor if vocational and marriage opportunities are increased, devolutional if individuals are compelled, by the accident of birth, to make vocational and marriage selections within the limits of the parental social status.

Type opportunity and class organisation favour social evolution, while the cause of national decadence is the degeneration of this grouping tendency, based upon natural fitness, into a caste tendency, based upon the natural self-assertive desires of those who have power and who strive to maintain it, holding their positions regardless of social efficiency. So that national decadence can be studied scientifically from this aspect alone. Some of the chief civilisations of the past and present periods may be roughly classified as follows:—

NATIONAL DECADENCE.

Akkads, Assyrians, Baby	ylo	nians	-			known
China and India -	I	mperial		Industrial		system
Egypt	-			Theocratic		,,
Carthage, Athens, Rome	e -	*		- City	1000	,,
Sparta, Germany -	-	-	-	Military		"
	-	1011214	-	Feudal	155	"
France	7	1 150		Municipal		"
United States, Russia	-	-	-	Monopolist	,,	"

The abuses of vicious living come, if this theory be correct, after caste organisation, which takes away the need for individual efficiency and are only indirectly the cause of national decay.

Type opportunity and class organisation on social lines should therefore be the ideals for the sociologist to uphold. That the trend of modern social science is to favour this type opportunity is evident from a study of works on this subject and from the practical effort that is being made to give, by means of scholarships, increased opportunity to poor scholars.

The scientific conception of type fitness has developed somewhat on these lines:—

1859. Darwin and Wallace. Competitive opportunity and unconscious selection the basis of organic evolution.

1887—1903. Gissing. Feeling of altruistic egoism essential to the realisation of the best individual capacity in the nation.

1892. Wallace. Equality of opportunity a necessary element in social evolution.

1894. Kidd. Equality of opportunity the basis of social evolution.

1898. Tayler. Individual educational opportunity the national and the individual ideal.

1904. Tayler. The conception of social type opportunity to be scientifically applied to educational, occupational, and domestic problems so that unconscious social selection shall take place.

One is thus led naturally, from the study of the selective influence of disease (its action being devolutional under caste conditions, evolutional under class specialisations) to the two other selection influences, those of marriage and vocation.

(ii.) Marriage.* I was led to some conclusions in rela-

^{*} I have not space to consider such marriage theories as those of Schopenhauer and others, though they have some historic interest.

tion to marriage by an inquiry that I started which proved abortive, but which showed clearly the fact that contrast marriages are quite rare among the poorer classes of the community; and, as these marriages result from individual choice (owing to greater freedom of sex friendship and less active social restrictions) more invariably than in any other part of the community, I have spent some time in investigating the principles upon which the choice appears to have been made.

For many reasons statistics are not obtainable; it is only long experience of life-habits of individuals that prove or disprove the wisdom of the choice that individuals make, and the rare happiness of perfect understanding that is evident in the truly happy and ideal marriage cannot be expressed statistically.

Broadly, however, there is a very close and generally happy relationship in the marriages of the poor; I should think, from my own medical experience, that they are as a rank much happier than in the middle or wealthier sections of the community. The faces of the men and women, and their humour prove this, as permanent unhappy expressions are a rarity. In six years' experience, after going through my case books, I can find only five completely incompatable marriages in which the man or the woman (in all my cases it has been the woman) has been acutely miserable for the whole period of their married life. Some individuals in these instances separate; usually it is the man who leaves the woman, but I have not been able to study such cases, as only one man or woman, husband or wife, has been under my observation. In the first instance, where they remained together, the man and woman have been absolute contrasts in all points except sex, the man in two instances being feminine, while the women have been uniformly womanly, but married to men unable to appreciate them. In all cases the man has been animal and brutal in body and mind, and the woman much above him, and this has been, I imagine, the chief source of the misery. In all cases the husband and wife have been contrasted in colour, one dark

and the other fair. I have seen one marriage where a very dark woman has married a very fair man, and the result has been apparently satisfactory, but both man and woman are neogenic types, and are the same age, and the womanliness of the woman finds a natural response in the man's manliness. Of four very happy marriages that I have seen where the happiness, after some years of marriage, in each other's presence was extraordinarily perfect, all were of the same shade of colour, age, height, mental capacity, and sexual development, and the resemblance to each other was striking. It has to be borne in mind that a woman is naturally a little darker than a man, about four to six inches shorter, and these together with other sex differences are a measure of sexual likeness of desire, and must be considered sexually. Thus a man of 6 feet corresponds to a woman of from 5 feet 6 inches to 5 feet 8 inches, and would be tall for a woman of 5 feet 4 inches. A woman exactly the same shade of hair and eyes as the man is really fairer. In some measure also, allowance should be made for age, a woman of 18 corresponding to a man of 20, but this is modified by early maturity, which causes adult feelings and thoughts to be developed earlier than the years appear to warrant, and also by the fact that maturity when reached is much the same for both sexes, only great differences in age producing large differences in outlook.

The points which determine a real affinity between men and women can be classed under the same head as those that determine friendship, namely, those that promote sympathy. That is, likenesses of character, not unlikenesses, are the basis of sexual as well as nonsexual love.

The reason for the necessity of this harmony is a very obvious one; if a husband is fond of reading and a wife detests it, one or the other is sacrificed; if the one is refined and the other coarse, the marriage relation violates and violates terribly the feelings of the refined individual. This is why it is that differences in mental outlook in married

^{*} I am of course considering extreme colour differences.

people of the poor are so seldom to be seen. Dark people are at times morose, sulky, and despondent; fair are quick tempered, changeable and hopeful. Just as it has been found that epileptics understand and can associate least harmfully with other epileptics, so among healthy minded persons you must have fair and fair, and dark and dark to understand each other. Again the passionate and sexually intense man or woman is usually miserable when married to one that is cold; and even in such slighter matters as food, it is necessary for health that both should have similar tastes, the "livery" husband who likes boiled food, soups with every trace of fat removed, will make the wife miserable who likes "tasty" fried or roast dishes. It is the harmony of likeness, not the discord of unlikeness, that is the governing factor in human love.*

The order of importance in these characteristics is from my experience as follows: (1) Neogenic or paleogenic mental likenesses. (2) Man and woman of same age from a few months or days difference, up to, but not exceeding four or five years. (3) Like sexuality, the more or less manly man married to the more or less womanly woman (this differentiation gives appearance of contrast). (4) Similar education. (5) Like colouring. (6) Like height. All these likenesses are very important factors, though they are differently combined in different individuals. (7) Occupation is not important, but it has nevertheless much power in affecting the woman; an "uninteresting" employment is very unfavourably regarded. The man's employment must interest both. Real harmony also makes a common racial and national origin a necessity. The normal marriage therefore is a harmonious one, and the degree of happiness is in proportion to the degree of similarity. With mental and sexual features, the happiness rises with the development of mental and sexual capacity. Great development of mind, especially if associated with great and equal sexual speciali-

^{*} Since giving this lecture, I have noticed an interesting fact quoted by Hall in his work on "Adolescence," that Abel and Brinton have both pointed out that love in all languages signifies likeness.

sation, gives the harmony of aims that like mental capacity brings with the diversity and freshness of different points of

one view which sex supplies.

There is another kind of marriage which I consider to be anomalous but not unhealthy, which is in a curious way corrective of extremes. A very tall man who has become unpleasantly conspicuous by his height may be so influenced by his unenviable notoriety as to acquire a dislike for his own characteristics, and as a consequence wishes to marry a very short woman. Little men, it is almost proverbial, marry big women, and feminine men masculine women, yet in these instances both the little man and the big woman admire size, and the feminine man admires a womanly woman though he marries a masculine or manly one, and the masculine woman admires a man more masculine than herself. These anomalous marriages are rarely wholly contrast marriages, as other points are harmonious and bring with them a common sympathy, but they are nearly always more or less commonplace, and particularly in those instances where the sexual basis of ideal married life is reversed. The large woman is never really happy with the small man, she would really have liked a man large enough to be big to her, to be her sexual equal, and the small man wishes really for the smaller woman. The masculine woman often tyrannises over the really feminine man, and under the best conditions their longing for a normal sex relationship exists. Only the man who is manly does not care for the masculine woman, and the womanly woman rejects the feminine man, and thus the masculine woman and the feminine man tend to approach each other. Below this anomalous or mutually corrective marriage is another kind that is abnormal.

Wealth, social position, coarseness, make all the ideals of no value. A man of forty marries a woman of twenty, their mutual outlooks are separated by a generation, their sexual ends are different, and there is no true comradeship. Second marriages usually belong to this class, and are rarely, if ever, happy in the highest sense of the word.

Three kinds of marriage therefore take place, the normal of like to like, the anomalous or corrective marriage, and the abnormal. The abnormal should of course be discouraged. It may be interesting to look at the eugenic effect of these marriages.

If a breeder wishes to secure a point in some animal, he mates it with some other that has the same character, the greater the similarity of horse and mare, cock and hen bird, bull and cow, dog and bitch, it matters not what animal to which it applies, the greater the chance of this point surviving. When there are many points in common, a new breed is produced. In the human individual this same principle must hold, hence the like to like marriage perpetuates its type, the unlike loses it. That is to say the normal marriage persists and is developed, the anomalous returns to the racial mean and is lost.

Looking at the matter more closely the problem may be stated in other terms: the most stable and the most universally shared qualities of the human race are the lowest, the most divergent are those that are highest in the evolutional scale of development, hence the like to like marriage tends, by bringing more and more of the individuality of one into unity with the individuality of the other, to be progressive by enforcing what is individual and human in each. The like to like marriage tends to favour progressive racial evolution, the anomalous and especially the abnormal retrogressive. Hence the harmony that is felt, not reasoned about, in true love is eugenically justified by science, and under conditions which favour co-association of the sexes (but not co-education nor co-industrial effort), and the freest amount of mental acquaintanceship the truest love marriages, and therefore those that are eugenically most suitable are likely to be formed.

Put diagrammatically, the position may be represented thus:—

MARRIAGE.

Progressive	Individual	Development	of	Character.
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		Social. I	omestic.	One man. One woman	. Domesti	c. Social			
3	^	Mental pursuits	Mental tastes	Very few Very few men women Monogamic marriage	Mental tastes	Mental pursuits	^		3
INDIVIDUAL		Mental moods Physical moods		Many men Many wome Monogamic marriage, polygamous desires	Menta	Mental moods Physical moods		INDIVIDUAL	2
1		Physical desires		Any woman Any man Abnormal civilised but normal barbaric	Physica	Physical desires			1
I		Physical desires		Sex relationship. Low physical selection	Physica	Physical desires			I
EUGENIC		Moods		Rather higher physical selection, low mental selection	Moods			EUGENIC	2
3	,	Mental	tastes	High mental and physical selection	Mental tastes		>		3
Progressive Race Development.									

Breeds are obtained by selecting same characters in both sexes. The normal marriage is based upon this principle, therefore conscious eugenic effort unnecessary.

Space does not permit me to enter into the interesting question of vocational selection, but I would point out that here also normal, anomalous and abnormal conditions exist. The *normal*, where inborn capacity and educational opportunity and vocational position harmonise. The *anomalous*, where caste, "society" aims, are overborne by inborn will to escape them. The *abnormal*, where the individual is wholly sacrificed.

(e) The last topic is also too long to be dealt with more than diagrammatically, but the correspondence that is here evident will at least, I feel convinced, make out a prima

facie case in support of my contention, that social organisation should be studied in relation to type evolution.

PALÆOLOGICAL.	Mesorogram			
Man. Palæogenic form	Mesological. Mesogenic.	Neological. Neogenic.		
Social Organisation. Slavery (ancient nations)	Caste (mediæval nations)	Natural classes (modern)		
Habits. Physical. Feasts of Mars and Venus, Greek and Roman celebrations generally, and in older nations. Many of these and like customs preserved in labouring classes of to-day.	Restrained physical celibacy, the church as an opponent of force.	Mental. Science, Music, Literature are taking posi- tion as predomi- nant social ideals and having men- tal words and phrases to repre- sent them.		
Marriage. Polygamous and indiscriminate.	Monogamous but for parental reason.	Monogamous for mental feelings.		
Occupation. Physical.	Physico-mental.	Mental.		
Ideals. Physical but mentally visualised.	Physico-mental.	Mental.		
Art. Architecture, beam form (wood imitation). Body form most studied.	Arch or dome. Body and face both studied.	Unborn. Face-form predom-inant.		
Music.		A modern growth.		
Science. Causal. Inanimate nature and physical part of human organism studied.	Observational ——>	Experimental To living, mental, & human phenomena.		
Poetry. Physical.	Physico-mental.	Mental.		
Religion. Material and animistic.	Physico-mental, anthropomorphic.	Mental, supra-human.		
Life Growing more complex	and difficult			

Life. Growing more complex and difficult.

Genius. In older time periods almost certainly inferior, but on account of simpler material produced more perfect work.

I am, in conclusion, deeply conscious of the imperfections of my paper, and would plead in excuse the shortness of time at my disposal, and the fact that I mean it to be suggestive rather than authoritative. I have endeavoured to raise issues rather than settle them, to point out that there is something to be said for the individuological interpretation of sociology, and if I have done this sufficiently to make other students, like myself, feel there are clues worth pursuing, I shall be more than content.

DISCUSSION

THE CHAIRMAN SAID:

I am sure we must all be very thankful to Dr. Tayler for the suggestive lecture he has given us, and for the valuable investigations of which he has been speaking during the latter part of it. I must say if I had to decide which is the more valuable part of the lecture, I should choose the latter. In fact, I do not quite see the connection between the earlier part or the theoretical foundations of sociology, and these investigations which are valuable in many different sociological constructions. A great many of these sociological super-structures are common ground to various sociological schools. To take an instance, Dr. Tayler put forward as a new discovery, due to his method, that there was great capacity among the poor; but if you go out into the street and ask the first person you meet whether Bunyan and Burns were not amongst the greatest men of their times, you will get the answer "yes," quite apart from any scheme of sociology. Again, in claiming that the study of sociology must begin with social units, a comparison is made with biology, in which, it is asserted, the study of cells is the necessary commencement in order to place it on a scientific foundation. But, if we look at the history of the science, we find that biology had arrived at an advanced stage before the study of cells was possible. As a matter of fact, the study of cells would have been impossible, if it had not been for the previous study of tissues.

One fact that struck me very much in the earlier part of the lecture was that it seemed to deal only with social static, whereas the peculiar characteristic of sociology as compared with biology is the existence of social dynamic, which deals with the most interesting problem of the science, the *development* of societies and the progress of civilisation. It is said that the individual is not pliable; but his intellect at all events is pliable to this extent, that one generation has entirely different beliefs to those which previous generations held, so that those who lived under the Roman Empire, and in the Middle Ages, and in the present day, have different views of the world around, and are occupied with different subjects of thought. That cannot result from differences between the individuals, but must arise from social differences, common to all of the same generation. In fact, man is first subject to the cosmical environment, then to the biological, and then to the social, on which depend his thoughts and his economic position and the life he lives. This general social environment reduces the effect of the peculiar environment in which any particular individual finds himself.

The changes which are continually taking place in the social organism-the result of many causes, but especially of intellectual and material accumulations, the increase of wealth and knowledge-produce a changed social environment, with which existing institutions must be brought into harmony. There must be a continual attempt to adapt old institutions to a new environment. But in this process, you will have institutions which are not exactly adapted to their environment, and the result will be those social difficulties to which the lecturer has alluded. When Dr. Tayler objects to such expressions as the "wealthy classes" and the "industrious classes" because some individuals have the characteristics of one of these classes less strongly marked than other individuals have, while some combine the characteristics of both classes, he is really objecting to all classification, always a logical artifice to bring our ideas into order. Nature is continuous, and we must mark off our compartments where the line is thinnest, or the differences are most striking and important. Let us take other classes-Englishmen and Frenchmen for instance. As you walk along the streets of some foreign town, you see you are amongst a new class. Some may be more like Englishmen than their fellows in this point or that, but you recognise that there are general differences, which you must consider before you can take into account the special differences between individuals. You want first to get at the most general environment. The natural order is, first the cosmical environment; then the biological; and then the social. And then you can go on to consider the effects, whether small or great, of these environments on individuals. The lecturer has brought

forward many points that are biological rather than sociological; and it is no doubt true that the more perfect biology is, the easier sociology will be. But still the great problem of sociology remains—the investigation of the laws in accordance with which society develops.

REV. J. HAND

Asked the lecturer what would be the average of the kind of individual he had referred to as having no special merit whatever. Would he, for example, be up to the average Hindoo, or Japanese, or Chinese, or American Negro? And again, if he considered the degeneracy due to poverty or want of work, or drink.

DR. SALEEBY SAID:

That Dr. Tayler had said very little about the marriage of like individuals, but it was interesting to note that he confirmed the conclusions arrived at by Professor Karl Pearson, though on different lines, that the successful marriage and the marriage that counts in the formation of species, is the marriage between people who resemble one another. Dr. Pearson called it homogamy, and laid much stress on it. His work was a completion of that done by Darwin in relation to sexual selection, and it applied not only to human beings in various countries, but also to certain animals; so that it seemed to be a universal principle. He wished Dr. Tayler would say more about this preponderance of marriages between individuals who were similar in point of physique, mind, and temperament.

DR. FILON

Asked whether this principle of homogamy or like-marriage, taken in conjunction with the giving of equal opportunities to all types which the lecturer had advocated, was not likely, in the future, to tend to the indefinite splitting up of the human species, and whether the lecturer thought that a desirable object?

WRITTEN COMMUNICATIONS

FROM MR. H. GORDON JONES.

As to Dr. Tayler's first proposition that Sociology should be based on Individuology, I find myself unable to agree with him in the position he takes up. I look upon sociology proper as having for its object the study of the laws of social phenomena-it has to investigate the constant relations which phenomena exhibit. Now, these phenomena are certainly the consequence of the facts of individual human nature; the social organism is, as it were, the life of the individual "writ large," it is the result of the development of human nature. Sociology must therefore have a biological basis, we must base the social life of the whole upon the life of its parts. But we do not need for this purpose to consider the varieties of individuals and their individual characters, because the individual peculiarities are neutralised in the growth of society, a growth which is due, not to the special characteristics of individuals, but to the existence of those common attributes of human nature which all men possess. And I think Dr. Tayler makes use of a false analogy when he speaks of the study of varieties of individuals and their methods of grouping themselves as constituting the foundation of sociology. It is quite true that the study of the cell, and the varieties of cells, is the foundation of biology, for both plants and animals are built up of cells; the properties of cells therefore form the subject-matter of biology. But in sociology, the analogue to the biological cell is not the individual per se, with all his idiosyncrasies, due to his special environment and heredity; the true analogue is human nature as a whole. The individual, in Dr. Tayler's sense of the word, corresponds to a species of plant or animal, and to base the study of sociology upon the individual characters of individuals, instead of their general characters, seems to me equivalent to saying that an abstract science, which I take sociology to be, can be based upon a concrete one. That an abstract science draws its data largely from concrete ones is true, but surely the basis of sociology is the abstract science of biology, and not such concrete studies of human nature as those referred to by Dr.

Tayler. Such studies appear to me to stand to sociology in the same relation as botany and zoology to biology. They would therefore constitute a kind of concrete sociology, and perhaps this is what Dr. Tayler means.

While raising this question of method, I thoroughly agree with the practical conclusions which Dr. Tayler has laid before us. To get a really efficient society, a society which would readily respond to the demands made upon it, we do want a much closer adaptation of social organs to their functions. One of the most important means of bringing this about lies, I think, in the universal adoption of a really scientific education for every social unit, an education such as that outlined by Comte. The result would be an enormous increase of social efficiency; each member of society would then be a social organ, fully conscious of the nature of the social organism and of his or her duties to it. Such a system of education would go a long way to break down the class-distinctions which still exist amongst us, and which, by limiting the opportunities of the individual unduly, promote social inefficiency. Dr. Tayler has rightly pointed out the great importance of, as far as possible, removing artificial restrictions upon marriage opportunities. The present system has the effect of separating society into as it were distinct layers, with little or no social life in common, and the natural result is the absence of that homogeneity which is indispensable for the highest social efficiency. I need hardly say that only the general adoption of a scientific system of education, will ever place marriagechoice upon a freer basis; for the real thing which keeps the classes apart is the absence of common ideals, and common modes of thought. We want a greater amount of intermarrying amongst the different classes of society, and the removal of unnecessary restrictions upon the development of the individual, restrictions which are no longer compatible with an industrial society.

FROM MR. H. OSMAN NEWLAND.

The points at which I am in agreement with Dr. Tayler are:

(1) That there is an urgent need for a science of Individuology.

(2) That in a large modern community, there cannot be expected or obtained an equality of opportunity, a state of equilibrium between the individual and his work, and a healthy social efficiency, without the existence and the aid of such a science.

(3) That the study of varieties of individuals, and their methods, conscious or unconscious, of grouping themselves, is a necessary part

of sociology.

(4) That sociology, to progress, must devise methods for organising the best means of favouring a better grouping of men and women.

The points at which I differ from Dr. Tayler are:

(1) That there is no other principle than an individuological one upon which to establish sociology.

(2) That sociology will rely for its data upon a new science (individuology), which describes the individual characters of individuals.

In the first place, to say that the foundation of sociology rests upon an individuological principle, seems to me a contradiction in terms as

well as a case of petitio principii.

Sociology is essentially a science which treats of man as he lives, acts, and thinks, not as an individual, but as a member of a Society. Individuology, on the other hand, is or will be a science which studies, or will study man as a member of a sub-society or individuo-socius, within the larger Society—this sub-socius being differentiated from, but depending for its existence upon membership in the greater society, as the greater includes the less. The sub-society, or, as it may be called for convenience, the caste or class, is differentiated from the parent society in being the result of a more artificial or more conscious selection; hence it is a later development.

Individuality itself, from the historic and evolutionary standpoint,

is the product of a highly organised state of society.

There is little, if any, differentiation between the chief and his people in a primitive society in which chief and people are of the same race; wherever a degree of differentiation appears, it is of a physical rather than of a mental nature. Under a despotic government, such as that in which the ruler is of a different race, and rules by right of conquest, there is no scope for individuality, save that which comes from the outside, namely by means of culture-contracts; and these do not take place in the earlier history of any society.

Even under civilised conditions, political societies and some cultural societies are not formed upon any principle of individuology, but upon the principle of sociability, *i.e.*, the capacity (a) of subordinating consciously one's individuality to the will of the few for the benefit of the many; or (b) of acquiescing consciously, or automatically, in the feeling and action of the multitude.

The study of sociology must then, in my opinion, be based primarily on the study of human nature en masse, and any investigation into the sub-grouping of individuality must be preceded by, or taken simultaneously with, an investigation into the causes of that subtle power in crowds, whether unorganised or organised, by which the individual loses his individuality and becomes temporarily another creature with his associates.

It seems to me also that Dr. Tayler contradicts himself when

he postulates that "individuals being less modified by their surroundings are more potent social influences," and afterwards proceeds to state that "any normal type tends to become unhealthy in any ill-adapted social atmosphere," and "a healthy child, if healthily environed, tends to grow into an adult individuality."

Perhaps, however, this contradiction is only apparent in the abstract of the paper, and clears itself in the context.

DR. TAYLER'S REPLY.

He would like to state, in reply to the Chairman's criticism, that there had been a little misunderstanding of his position. The root-conception of his lecture was the idea of the study of individuals on individual lines as being a necessary preliminary to the study of the grouping of individuals on social lines. These were two distinct subjects, but the conclusions of the former one were necessary to the latter.

He thought, as Mr. Swinny had pointed out, that every one did know that talent was to be found in the poorer sections of the community; the point that he wished to make clear was not this at all, but another of a different nature, namely, that the talent that does find expression, that does become known and serve a social end, is only a fraction, a very small percentage of what could be utilised.

He maintained that to found sociology upon individuology, rather than upon inanimate climatic and architectural surveys, was to give the science just that dynamic character which he thought Mr. Swinny rightly desired. And though he shared with Mr. Swinny the belief that the human organism was in large measure responsive and adaptable, he yet differed from him in one respect, thinking that this responsiveness was strictly limited by the nature of the organism, and was not, as Mr. Swinny appeared to believe, indeterminate. That Roman thought was different to our own was largely due to the fact that we ourselves were different, type evolution to a great extent controlling thought evolution indirectly, through a change in inborn desiring

capacity.

In one sense he was quite prepared to accept the chairman's view that individuological material is biological, but then from another aspect it is sociological, and just because it embodies conceptions that neither science can include, he felt the need for the existence of such a science to be real

and practical.

One other question was briefly referred to. He had, he said, no objection to the word class when it was scientifically interpreted, but popularly class and caste are terms that are much misunderstood. People refer to cultured and wealthy classes, when they mean caste formations. Caste is an exclusive and collective term, class represented on the other hand a natural grouping of individuals of like powers. It was the popular use of the word that he deprecated. He considered that they must, as scientific sociologists, be willing to grant the freest opportunity to the individual so that he or she could attach himself or herself to the social group or class to which such an individual naturally, by hereditary capacity, belonged. The principle of type opportunity which would favour natural class formations having distinctive social values, was to his thinking the leading one for all sociological studies to be based upon, for it was this opportunity that made vocational and domestic selective influences efficient factors in social evolution.

In reply to Mr. Hand, he would say that the persons he had referred to were very barbaric. What struck him as a medical man was that people were naturally grouped in streets, but usually some individuals stood out as superior. In this particular street there was no individual who he thought was much above his surroundings. He did not think it was a matter of degeneracy, but of "type." The respectable person could not live there; he would find a place elsewhere. In course of time these people intermarried, and their condition was due to the perpetuation of the barbaric type in bad surroundings.

In reply to Dr. Saleeby, he would say that the only other point that had specially struck him was in relation to a remark of Mr. Galton's that a parent often thought the child was very much influenced by his surroundings when the child responded to the parents' guiding influence because he was of like nature. He had been much struck with this in regard to the home. If the two parents were alike, they understood their children because the children were like them. If the parents were unlike, they misunderstood the children and brought them up badly. With regard to the position of Professor Karl Pearson, and others who had studied marriage on similar lines, they were, as Dr. Saleeby had said, in many respects similar to his own, but considered from a different aspect. The whole subject required much deeper study and research than had so far been given to it. The eugenic value of unconscious natural marriage selection when it was uninterfered with (the normal, like to like marriage favouring progressive elements in the nation, and the anomalous marriage checking extreme divergence and preserving a mean standard) was the chief observation that had interested him, as this united the individual ideal of a love-comradeship marriage with the social ideal of eugenic fitness for parentage, and the sociological value of this unity was, of course, incalculable.

In reply to Dr. Filon, he thought anomalous marriages would tend to check too intense specialisation, as an individual who once became so far divergent from his fellows as to be noticed by them and disliked or misunderstood, would tend to marry someone who had perhaps opposite characteristics, an ultra-artistic type marrying an ultra-scientific one, just as an albino might marry a very dark person, not for the sake of possible children that might be born to them, though this end would be unconsciously realised, but because their own peculiarities had by incessant unfavourable notice come to be regarded with dislike, and the presence of the opposite character tended thus to attract them.

Further, the more highly organised the state, the

greater would be the sense of a prescribing common unity of aim, and this again would check an indefinite formation of unconnected human types. Still there could be no doubt that this question needed much attention and thought.

